



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/550,312      | 09/22/2005  | Tomomasa Kojo        | S1459.70085US00     | 5773             |

23628 7590 06/02/2009  
WOLF GREENFIELD & SACKS, P.C.  
600 ATLANTIC AVENUE  
BOSTON, MA 02210-2206

|          |
|----------|
| EXAMINER |
|----------|

LEE IV, THOMAS E

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2447

|           |               |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

06/02/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/550,312 | <b>Applicant(s)</b><br>KOJO ET AL. |  |
|                              | <b>Examiner</b><br>THOMAS LEE        | <b>Art Unit</b><br>2447            |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The applicants amended claims 1-5 and 7-10 in the amendment received on 3/3/2009.

Claims 1-10 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

A. The applicants argue that Aoki fails to teach a method for management for connection to a public network in which an electronic apparatus including an access controller for detecting connection or non-connection to a network cable and a micro-computer is used, said method comprising: carrying out, in executing an application, a first check to determine if a malfunction pertinent to the network connection exists, by detecting a state of an electrical connection of said network cable, responsive to a detection output of said access controller; carrying out a second check, by said access controller, as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning only if, as a result of said first check, no malfunction pertinent to the network connection is detected; and carrying out accessing of said application to said public network if, as a result of said second check, the linkage to said public network is normal.

In light of the amendments, the examiner has provided new grounds of rejection, wherein Aoki in view of Daymond et al. (US 2004/0019691 A1) teach a method for management for connection to a public network in which an electronic apparatus including an access controller for detecting connection or non-connection to a network cable and a micro-computer is used, said method comprising: carrying out, in executing an application, a first check to determine if a malfunction pertinent to the network connection exists, by detecting a state of an electrical connection of said network cable, responsive to a detection output of said access controller; carrying out a second check, by said access controller, as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning only if, as a result of said first check, no malfunction pertinent to the network connection is detected; and carrying out accessing of said application to said public network if, as a result of said second check, the linkage to said public network is normal. In the new grounds of rejection, Daymond teaches a check as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning (i.e., the connection to the public network is verified by checking external servers such as a DNS or service provider servers, paragraphs 0119-0123); and accessing said public network if the linkage to said public network is normal (i.e., the user can access the public network when errors do not exist, paragraphs 0094-0095 and 0114). The

amended limitations of the claim, as taught by Aoki in view of Daymond, are further disclosed below.

B. The applicants argue that Aoki fails to teach an electronic apparatus for use with a public network, comprising: a connector jack for connection to a network cable; an access controller for detecting connection or non-connection of said network cable to said connector jack; and a micro-computer; said micro-computer carrying out, in executing an application, a first check to determine if a malfunction pertinent to connection to the network exists, by detecting a state of electrical connection of said network cable, responsive to a detection output of said access controller; carrying out a second check, by said access controller, as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning only if, as a result of said first check, no malfunction pertinent to the network connection is detected; and carrying out accessing of said application to said public network if, as a result of said second check, the linkage to said public network is normal.

In light of the amendments, the examiner has provided new grounds of rejection, wherein Aoki in view of Daymond et al. (US 2004/0019691 A1) teach an electronic apparatus for use with a public network, comprising: a connector jack for connection to a network cable; an access controller for detecting connection or non-connection of said network cable to said connector jack; and a

micro-computer; said micro-computer carrying out, in executing an application, a first check to determine if a malfunction pertinent to connection to the network exists, by detecting a state of electrical connection of said network cable, responsive to a detection output of said access controller; carrying out a second check, by said access controller, as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning only if, as a result of said first check, no malfunction pertinent to the network connection is detected; and carrying out accessing of said application to said public network if, as a result of said second check, the linkage to said public network is normal. In the new grounds of rejection, Daymond teaches an electronic apparatus for use with a public network (i.e., the set top box accesses the internet, local network, and gateway, paragraphs 0048-0053); a check to determine if a malfunction pertinent to the public connection exists (i.e., the set top box can analyze the home network to determine if a local network connection problem exists for further access to the public network, where the checking process is cyclic, thus existing in any order, paragraphs 0115-0118); a check as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning (i.e., the connection to the public network is verified by checking external servers such as a DNS or service provider servers, paragraphs 0119-0123); and accessing said public network if the linkage to said public network is

Art Unit: 2447

normal (i.e., the user can access the public network when errors do not exist, paragraphs 0094-0095 and 0114). The amended limitations of the claim, as taught by Aoki in view of Daymond, are further disclosed below.

C. The applicants argue that Aoki fails to teach detecting error information only if, as a result of said first check, there is no malfunction pertinent to the network connection.

However, the examiner respectfully traverses. Aoki teaches detecting error information (i.e., errors are detected, paragraph 112 and Figure 21, item S21) only if, as a result of said first check, there is no malfunction pertinent to the network connection (i.e., the connection is checked for errors specific to a connection being made, where these errors are only checked when there is a connection, paragraphs 112-113 and Figure 21, items S17 and S21 and YES identified line).

D. The applicants argue that a timeout period in which a user is unable to make a request to the device during a second check does not exist in the system of Aoki.

However, the examiner respectfully traverses. Aoki teaches a timeout period (i.e., a fixed time is required to evaluate if the systems are synchronized, where the fixed time teaches a time period, paragraph 90) in which a user is unable to make a request (i.e., users request to utilize devices attached to an AV

Art Unit: 2447

apparatus, and the request cannot be satisfied until the systems are properly connected, paragraphs 4-5, 74, 83, and 90) to the device during a second check (i.e., the user cannot request to utilize a connected device to the AV apparatus until the devices are correctly connected, which occurs after the network connector is established and utilizes a fixed time, paragraphs 0090 and 111-113).

### ***Specification***

3. The disclosure is objected to because of the following informalities:
  - The contents of the specification fail to provide headings to identify sections for the “Brief Summary of the Invention” (see MPEP 608.01(d)) and “Detailed Description of the Invention” (see MPEP 608.01(g)).

Appropriate correction is required.

### ***Claim Objections***

4. Claims 1-5 and 7-10 are objected to because of the following informalities:
  - Claims 1-5 and 7-10, there is insufficient antecedent basis for use of a public network by the invention as stated in the specification.

Appropriate correction is required.



***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. (U.S. Publication No. 2002/0047862 A1) in view of Daymond et al. (US 2004/0019691 A1).

With respect to claim 1, Aoki teaches the management for connection to a network in which an electronic apparatus including an access controller for detecting the connection or the non-connection to a network cable (i.e., the signal processing section controls the operations of access to the network, paragraph 0086) and a micro-computer is used (i.e., the main body processing section includes a CPU, paragraph 0091), said method comprising carrying out, in executing an application, a first check as to determine if a malfunction pertinent to the network connection exists, by detecting the a state of electrical connection of said network cable responsive to a detection output of said access controller (i.e., the signal processing section detects errors such as cable pulling in or out and relays this to the main processing section, paragraph 0088 and figure 21, items S17-S20); carrying out a second check, by said access controller, as to whether or not the linkage to said network is normal only if, as a result of said first

Art Unit: 2447

check, no malfunction pertinent to the network connection is detected (i.e., the signal processing section detects error information with regards to network operations while making a distinction between an error of the receiving system on the network and an error within the device, where the second check is performed as a result of the first check, paragraphs 90 and 109-113 and figure 21, items S17, and S21-S23); and carrying out accessing of said application to said network if, as a result of said second check, the linkage to said network is normal (i.e., the checks are performed and can be changed in logical order and upon completion of the network checks, if no error is detected, processing continues, paragraph 0187). Aoki does not explicitly disclose a check as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning; and accessing said public network if the linkage to said public network is normal. However, Daymond teaches a check as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning (i.e., the connection to the public network is verified by checking external servers such as a DNS or service provider servers, paragraphs 0119-0123); and accessing said public network if the linkage to said public network is normal (i.e., the user can access the public network when errors do not exist, paragraphs 0094-0095 and 0114), in order to provide a reliable convergent multimedia system for accessing a local and remote network by providing connectivity checking with an announcement on the display screen or other output (Daymond, paragraphs 0020 and 0025-0026). Therefore, based on Aoki in view

Art Unit: 2447

of Daymond, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Daymond to the system of Aoki in order to provide a reliable convergent multimedia system for accessing a local and remote network by providing connectivity checking with an announcement on the display screen or other output.

With respect to claim 2, Aoki teaches the management for connection to a network according to claim 1 wherein, if, as a result of said first check, the malfunction in said network connection is detected, an indication of the malfunction in said network connection is displayed, and wherein if, as a result of said second check, the malfunction in a linkage to said network is detected, an indication of the malfunction in said linkage to said network is displayed (i.e., the main body processing section determines the most appropriate error message to display in regards to the connection state and displays the message, where the second error check would only be displayed if a connection existed, paragraphs 0092-0095 and figure 21, items S17-S23). Aoki does not explicitly disclose a public network. However, Daymond teaches a public network (i.e., the system checks and utilizes the public network, paragraphs 0094-0095 and 0114-0123), and further displaying an indication of the network connection (paragraph 0023). Hence, the limitations of claim 2 are rejected in the analysis of claim 1 above, and claim 2 is rejected on that basis.

With respect to claim 3, Aoki teaches the management for connection to a network according to claim 1 wherein the application carries out said first and second checks at a preset time interval (i.e., the checks are processed in an ordered fashion

Art Unit: 2447

able to be controlled by the signal processing section at appropriately determined time intervals, figures 20-23 and paragraph 0174, or upon the instantiation of some event to the connection, such as a cable pulling out, paragraph 0088). However, Aoki does not explicitly disclose a public network. However, Daymond teaches a public network (i.e., the system checks and utilizes the public network, paragraphs 0094-0095 and 0114-0123), and further carrying out checks at a preset time interval (paragraph 0069).

Hence, the limitations of claim 3 are rejected in the analysis of claim 1 above, and claim 3 is rejected on that basis.

With respect to claim 4, Aoki teaches an electronic comprising a connector jack for connection to a network cable; an access controller for detecting the connection or non-connection of said network cable to said connector jack (i.e., the signal processing section controls the operations of access to the network, paragraph 0086); and a micro-computer; said micro-computer carrying out, in executing an application (i.e., the main body processing section includes a CPU, paragraph 0091), a first check as to determine if a malfunction pertinent to connection to the network exists, by detecting the state of an electrical connection of said network cable, responsive to a detection output of said access controller (i.e., the signal processing section detects errors such as cable pulling in or out and relays this to the main processing section, paragraph 0088 and figure 21, items S17-S20); carrying out a second check, by said access controller, as to whether or not the linkage to said network is normal only if, as a result of said first check, no malfunction pertinent to the network connection is detected (i.e., the signal processing section detects error information with regards to network operations while making a

Art Unit: 2447

distinction between an error of the receiving system on the network and an error within the device, where the second check is performed as a result of the first check, paragraphs 90 and 109-113 and figure 21, items S17, and S21-S23); and carrying out accessing of said application to said network if, as a result of said second check, the linkage to said network is normal (i.e., the checks are performed and can be changed in logical order and upon completion of the network checks, if no error is detected, processing continues, paragraph 0187). Aoki does not explicitly disclose an electronic apparatus for use with a public network; a check to determine if a malfunction pertinent to the public connection exists; a check as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning; and accessing said public network if the linkage to said public network is normal. However, Daymond teaches an electronic apparatus for use with a public network (i.e., the set top box accesses the internet, local network, and gateway, paragraphs 0048-0053); a check to determine if a malfunction pertinent to the public connection exists (i.e., the set top box can analyze the home network to determine if a local network connection problem exists for further access to the public network, where the checking process is cyclic, thus existing in any order, paragraphs 0115-0118); a check as to whether or not linkage to said public network is normal by determining if a network device connected to the public network and external to the electronic apparatus is malfunctioning (i.e., the connection to the public network is verified by checking external servers such as a DNS or service provider servers, paragraphs 0119-0123); and accessing said public network if the

Art Unit: 2447

linkage to said public network is normal (i.e., the user can access the public network when errors do not exist, paragraphs 0094-0095 and 0114), in order to provide a reliable convergent multimedia system for accessing a local and remote network by providing connectivity checking with an announcement on the display screen or other output (Daymond, paragraphs 0020 and 0025-0026). Therefore, based on Aoki in view of Daymond, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Daymond to the system of Aoki in order to provide a reliable convergent multimedia system for accessing a local and remote network by providing connectivity checking with an announcement on the display screen or other output.

With respect to claim 5, Aoki teaches the electronic apparatus according to claim 4, wherein if, as a result of said first check, the malfunction in the connection, to said network is detected, an indication of the malfunction in said connection is displayed, and wherein if, as a result of said second check, the linkage to said network is not normal, an indication of the malfunction in said connection to said network is displayed (i.e., the main body processing section determines the most appropriate error message to display, in regards to the connection state and displays the message, where the second error check would only be displayed if a connection existed, paragraphs 0092-0095 and figure 21, items S17-S23). Aoki does not explicitly disclose a public network.

However, Daymond teaches a public network (i.e., the system checks and utilizes the public network, paragraphs 0094-0095 and 0114-0123), and further displaying an

Art Unit: 2447

indication of the network connection (paragraph 0023). Hence, the limitations of claim 5 are rejected in the analysis of claim 4 above, and claim 5 is rejected on that basis.

With respect to claim 6, Aoki teaches the management for connection to a network according to claim 4 wherein the application carries out said first and second checks at a preset time interval (i.e., the checks are processed in an ordered fashion able to be controlled by the signal processing section at appropriately determined time intervals, figures 20-23, or upon the instantiation of some event to the connection, such as a cable pulling out, paragraph 0088). To further clarify, Daymond also teaches carrying out checks at a preset time interval (paragraph 0069). Hence, the limitations of claim 6 are rejected in the analysis of claim 4 above, and claim 6 is rejected on that basis.

With respect to claim 8, Aoki teaches the method for management for connection to a network according to claim 1, wherein a correction of the malfunction pertinent to the network connection is controllable by a user of said electronic apparatus (i.e., the display shows the reason why there is no connection, such as an unplugged cable, which is a low order error and controllable by a user, paragraphs 90 and 134 and figure 21, items S20 and S24). However, Aoki does not explicitly disclose a public network. However, Daymond teaches a public network (i.e., the system checks and utilizes the public network, paragraphs 0094-0095 and 0114-0123), and further a correction of the malfunction pertinent to the first check is controllable by a user of said electronic apparatus (i.e., the inability to ping the local area network is correctable by the user and trouble-shooting data is provided, paragraphs 0117 and 0126-0127 and figures 6A and

Art Unit: 2447

B). Hence, the limitations of claim 8 are rejected in the analysis of claim 1 above, and claim 8 is rejected on that basis.

With respect to claim 9, Aoki teaches the method for management for connection to a network according to claim 1, wherein a correction of the malfunction in a linkage to said network is not controllable by a user of said electronic apparatus (i.e., the display shows the reason why there is a connection error, such as connection error on another device, which is a high order error and not controllable by a user of the device, paragraphs 134-136 and figure 21, items 21-24). However, Aoki does not explicitly disclose a public network. However, Daymond teaches a public network (i.e., the system checks and utilizes the public network, paragraphs 0094-0095 and 0114-0123), and further a correction of the malfunction in a linkage to said public network is not controllable by a user of said electronic apparatus (i.e., several pings may take place to access specific functionality and the user dialog box may be tailored to the correction necessary, where the final corrective action may not be accessible to the user, paragraphs 0117 and 00128-0129). Hence, the limitations of claim 9 are rejected in the analysis of claim 1 above, and claim 9 is rejected on that basis.

With respect to claim 10, Aoki teaches the method for management for connection to a network according to claim 1, wherein the second check includes a time-out period during which said electronic device ceases to respond to a request from a user of said electronic device (i.e., the user requests to utilize a network with the device and the device does not respond with regards to the network request due checking a synchronizing signal during a fixed time, or a time-out, period, paragraphs 4,



Art Unit: 2447

5, and 90). To further clarify, Daymond also teaches a time-out period during which said electronic device ceases to respond for the process (i.e., for the network pings, the device waits a certain period of time, teaching does not respond, paragraph 0063). Hence, the limitations of claim 10 are rejected in the analysis of claim 1 above, and claim 10 is rejected on that basis.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. (U.S. Publication No. 2002/0047862 A1) in view of Daymond et al. (US 2004/0019691 A1), and further in view of Hori et al. (US Patent 6,845,406).

With respect to claim 7, Aoki teaches the method for management for connection to a network according to claim 1, wherein the first check comprises construing an error output of the access controller (i.e., the Mainbody Processing Section receives error outputs from the Signal Processing Section, paragraph 90). However, Aoki does not explicitly disclose a public network. However, Daymond teaches a public network (i.e., the system checks and utilizes the public network, paragraphs 0094-0095 and 0114-0123). Hence, the limitations of claim 7 are rejected in the analysis of claim 1 above, and claim 7 is rejected on that basis.

Aoki and Daymond do not explicitly disclose a network interrupt output from the access controller. However, Hori teaches construing a network interrupt output from the access controller (i.e., the PCI bus of the modem, or access controller, outputs an interrupt for post connection, or network connection, to the CPU for processing, column 12, line 9-34), in order to maintain the status of having a network connection (Hori,

Art Unit: 2447

column 3, lines 7-14). Therefore, based on Aoki in view of Daymond, and further in view of Hori, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Hori to the system of Aoki and Daymond in order to maintain the status of having a network connection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS LEE whose telephone number is (571) 270-7292. The examiner can normally be reached on Monday to Friday, 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Hwang can be reached on (571) 272-4036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2447

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T.L./

Examiner, Art Unit 2447

14 May 2009

...

/Joon H. Hwang/

Supervisory Patent Examiner, Art Unit 2447